

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/830,837B  
Source: IFW/6  
Date Processed by STIC: 2/23/06

***ENTERED***

## **CRF Errors Edited by the STIC Systems Branch**

Serial Number: 09/830,837B

CRF Edit Date: 2/23/06  
Edited by: N

- Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

/

Corrected the SEQ ID NO. Sequence numbers edited were:

61,87

- Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

/

Deleted: / invalid beginning/end-of-file text ; / page numbers

- Inserted mandatory headings/numeric identifiers, specifically:

/

Moved responses to same line as heading/numeric identifier, specifically:

/

Other:

/  
/  
/



IFW16

**RAW SEQUENCE LISTING** DATE: 02/24/2006  
**PATENT APPLICATION:** US/09/830,837B TIME: 15:45:00

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF4\02242006\I830837B.raw

3 <110> APPLICANT: Institut de Recherches Cliniques de Montreal  
4 Seidah, Nabil  
5 ChrEtien, Michel  
6 Marcinkiewicz, Mieczyslaw  
7 Laaksonen, Reijo  
8 Davignon, Jean  
10 <120> TITLE OF INVENTION: MAMMALIAN SUBTILISIN/KEXIN ISOZYME SKI-1: A PROPROTEIN  
CONVERTASE  
11 WITH A UNIQUE CLEAVAGE SPECIFICITY  
13 <130> FILE REFERENCE: 10992.29  
15 <140> CURRENT APPLICATION NUMBER: US 09/830,837B  
C--> 16 <141> CURRENT FILING DATE: 2001-10-18  
18 <150> PRIOR APPLICATION NUMBER: PCT/CA1999/01058  
19 <151> PRIOR FILING DATE: 1999-11-04  
21 <150> PRIOR APPLICATION NUMBER: CA 2,249,648  
22 <151> PRIOR FILING DATE: 1998-11-04  
24 <160> NUMBER OF SEQ ID NOS: 108  
26 <170> SOFTWARE: PatentIn version 3.3  
28 <210> SEQ ID NO: 1  
29 <211> LENGTH: 3895  
30 <212> TYPE: DNA  
31 <213> ORGANISM: Rattus sp.  
34 <220> FEATURE:  
35 <221> NAME/KEY: CDS  
36 <222> LOCATION: (418)..(3573)  
38 <400> SEQUENCE: 1  
39 gcgagtaaac atccccgaa tggatacccg aggcgtgttc gcggcggagg ccccgtttc 60  
41 ccgggtccgc cgatcccgag cctgaggcgag cgcatcgatcggttggcttgggc 120  
43 tcctgctaga tttgggtctg tggtacaaat ggagtttagg actcagtggatctggcccta 180  
45 atgagagaag cccccctgtcc aagatggaga agaagcggag aaagaaaatga aagcctcttt 240  
47 ttgggccaag ctgtgggtga ccatggact gaggtttcttacgttgaa caagtctgtaa 300  
49 ggatggctga tcagtaaggt tgcaatggat agcgaaaaca gaaatccact tctgtatcaag 360  
51 gaagagccta gtgcaatggat aatttatgca attttatgac catattcaact taggacc 417  
53 atg aag ctc gtc aac atc tgg ctt ctt ctg ctg gtg gtt ttg ctc tgt 465  
54 Met Lys Leu Val Asn Ile Trp Leu Leu Leu Val Val Leu Leu Cys  
55 1 5 10 15  
57 ggg aaa aag cat ctg ggt gac agg ctg ggg aag aaa gct ttt gaa aag 513  
58 Gly Lys Lys His Leu Gly Asp Arg Leu Gly Lys Lys Ala Phe Glu Lys  
59 20 25 30  
61 gcc cca tgc ccc agc tgt tcc cac ctg act ttg aag gtg gaa ttc tcc 561  
62 Ala Pro Cys Pro Ser Cys Ser His Leu Thr Leu Lys Val Glu Phe Ser  
63 35 40 45  
65 tca act gtg gtg gaa tat gaa tat att gtg gct ttc aac gga tac ttc 609  
66 Ser Thr Val Val Glu Tyr Glu Tyr Ile Val Ala Phe Asn Gly Tyr Phe

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|-----|---|-----|-----|------|
| 67  | 50  | 55  | 60  |      |
| 69  | aca gcc aaa gct aga aac tca ttt att tca agt gct cta aaa agc agt |     |     | 657  |
| 70  | Thr Ala Lys Ala Arg Asn Ser Phe Ile Ser Ser Ala Leu Lys Ser Ser |     |     |      |
| 71  | 65  | 70  | 75  | 80   |
| 73  | gaa gtg gac aac tgg aga ata ata cct cgg aac aac cca tct agt gac |     |     | 705  |
| 74  | Glu Val Asp Asn Trp Arg Ile Ile Pro Arg Asn Asn Pro Ser Ser Asp |     |     |      |
| 75  | 85  | 90  | 95  |      |
| 77  | tac cct agt gat ttt gag gtg att cag ata aaa gag aag cag aag gcg |     |     | 753  |
| 78  | Tyr Pro Ser Asp Phe Glu Val Ile Gln Ile Lys Glu Lys Gln Lys Ala |     |     |      |
| 79  | 100   | 105 | 110 |      |
| 81  | ggg ctg ctc aca ctt gaa gat cac cca aac atc aag cgg gtg aca ccc |     |     | 801  |
| 82  | Gly Leu Leu Thr Leu Glu Asp His Pro Asn Ile Lys Arg Val Thr Pro |     |     |      |
| 83  | 115   | 120 | 125 |      |
| 85  | cag cgg aaa gtc ttt cgt tcc ctg aag ttt gct gaa tcc gac ccc att |     |     | 849  |
| 86  | Gln Arg Lys Val Phe Arg Ser Leu Lys Phe Ala Glu Ser Asp Pro Ile |     |     |      |
| 87  | 130   | 135 | 140 |      |
| 89  | gtg ccc tgt aat gag acc cgg tgg agc cag aag tgg cag tca tca cgt |     |     | 897  |
| 90  | Val Pro Cys Asn Glu Thr Arg Trp Ser Gln Lys Trp Gln Ser Ser Arg |     |     |      |
| 91  | 145   | 150 | 155 | 160  |
| 93  | ccc ctg aaa aga gcc agt ctc tcc ctg ggc tct gga ttc tgg cat gca |     |     | 945  |
| 94  | Pro Leu Lys Arg Ala Ser Leu Ser Leu Gly Ser Gly Phe Trp His Ala |     |     |      |
| 95  | 165   | 170 | 175 |      |
| 97  | aca gga agg cat tca agt cga cga ttg ctg aga gcc att cct cgc cag |     |     | 993  |
| 98  | Thr Gly Arg His Ser Ser Arg Arg Leu Leu Arg Ala Ile Pro Arg Gln |     |     |      |
| 99  | 180   | 185 | 190 |      |
| 101 | gtt gcc cag aca ttg cag gca gat gtg ctt tgg cag atg gga tac aca |     |     | 1041 |
| 102 | Val Ala Gln Thr Leu Gln Ala Asp Val Leu Trp Gln Met Gly Tyr Thr |     |     |      |
| 103 | 195   | 200 | 205 |      |
| 105 | ggt gct aat gtc agg gtt gcc gtt ttt gat act ggg ctc agt gag aag |     |     | 1089 |
| 106 | Gly Ala Asn Val Arg Val Ala Val Phe Asp Thr Gly Leu Ser Glu Lys |     |     |      |
| 107 | 210   | 215 | 220 |      |
| 109 | cat cca cat ttc aag aat gtg aag gaa aga acc aac tgg acc aat gag |     |     | 1137 |
| 110 | His Pro His Phe Lys Asn Val Lys Glu Arg Thr Asn Trp Thr Asn Glu |     |     |      |
| 111 | 225   | 230 | 235 | 240  |
| 113 | cgg acc ctg gac gat ggg ctg ggc cat ggc aca ttc gtt gca ggt gtg |     |     | 1185 |
| 114 | Arg Thr Leu Asp Asp Gly Leu Gly His Gly Thr Phe Val Ala Gly Val |     |     |      |
| 115 | 245   | 250 | 255 |      |
| 119 | att gcc agc atg aga gag tgc caa gga ttt gcc cca gat gca gag ctg |     |     | 1233 |
| 120 | Ile Ala Ser Met Arg Glu Cys Gln Gly Phe Ala Pro Asp Ala Glu Leu |     |     |      |
| 121 | 260   | 265 | 270 |      |
| 123 | cac atc ttc agg gtc ttt acc aac aat cag gtg tct tac acg tct tgg |     |     | 1281 |
| 124 | His Ile Phe Arg Val Phe Thr Asn Asn Gln Val Ser Tyr Thr Ser Trp |     |     |      |
| 125 | 275   | 280 | 285 |      |
| 127 | ttt ttg gat gcc ttc aac tat gcc atc cta aag aag atg gac gtt ctg |     |     | 1329 |
| 128 | Phe Leu Asp Ala Phe Asn Tyr Ala Ile Leu Lys Lys Met Asp Val Leu |     |     |      |
| 129 | 290   | 295 | 300 |      |
| 131 | aac ctt agc atc ggt ggg cct gac ttc atg gat cac ccc ttt gtt gac |     |     | 1377 |
| 132 | Asn Leu Ser Ile Gly Gly Pro Asp Phe Met Asp His Pro Phe Val Asp |     |     |      |
| 133 | 305   | 310 | 315 | 320  |

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|   |      |
|---|------|
| 135 aag gta tgg gaa tta aca gcg aac aat gta atc atg gtt tct gct att | 1425 |
| 136 Lys Val Trp Glu Leu Thr Ala Asn Asn Val Ile Met Val Ser Ala Ile |      |
| 137 325 330 335   |      |
| 139 ggc aat gat gga cct ctc tat ggc act ctg aat aac cct gct gat cag | 1473 |
| 140 Gly Asn Asp Gly Pro Leu Tyr Gly Thr Leu Asn Asn Pro Ala Asp Gln |      |
| 141 340 345 350   |      |
| 143 atg gat gtg att gga gtg ggt ggc att gac ttt gaa gac aac atc gcc | 1521 |
| 144 Met Asp Val Ile Gly Val Gly Ile Asp Phe Glu Asp Asn Ile Ala     |      |
| 145 355 360 365   |      |
| 147 cgc ttc tct tcc agg gga atg act acc tgg gaa cta ccg gga ggc tat | 1569 |
| 148 Arg Phe Ser Ser Arg Gly Met Thr Thr Trp Glu Leu Pro Gly Gly Tyr |      |
| 149 370 375 380   |      |
| 151 ggt cgt gtg aag cct gac att gtc acc tat ggt gct gga gtg cgg ggt | 1617 |
| 152 Gly Arg Val Lys Pro Asp Ile Val Thr Tyr Gly Ala Gly Val Arg Gly |      |
| 153 385 390 395 400   |      |
| 155 tct ggt gtg aaa ggg ggc tgc cgt gca ctc tca ggg acc agt gtc gcc | 1665 |
| 156 Ser Gly Val Lys Gly Gly Cys Arg Ala Leu Ser Gly Thr Ser Val Ala |      |
| 157 405 410 415   |      |
| 159 tcc cca gtg gtt gct ggg gct gtc acc ttg tta gta agc aca gta cag | 1713 |
| 160 Ser Pro Val Val Ala Gly Ala Val Thr Leu Leu Val Ser Thr Val Gln |      |
| 161 420 425 430   |      |
| 163 aag cgq qag cta qtg aat cct gcc agt qtg aag caa gct ttg ata gca | 1761 |
| 164 Lys Arg Glu Leu Val Asn Pro Ala Ser Val Lys Gln Ala Leu Ile Ala |      |
| 165 435 440 445   |      |
| 167 tca gcc cgq aga ctt cct ggt gtc aac atg ttt gag caa ggc cat ggc | 1809 |
| 168 Ser Ala Arg Arg Leu Pro Gly Val Asn Met Phe Glu Gln Gly His Gly |      |
| 169 450 455 460   |      |
| 171 aag ttg gat cta ctg cga gcc tat cag atc ctc agc agc tat aaa ccg | 1857 |
| 172 Lys Leu Asp Leu Leu Arg Ala Tyr Gln Ile Leu Ser Ser Tyr Lys Pro |      |
| 173 465 470 475 480   |      |
| 175 cag gcg agc ctg agt cct agc tac atc gac ctg act gag tgt ccc tac | 1905 |
| 176 Gln Ala Ser Leu Ser Pro Ser Tyr Ile Asp Leu Thr Glu Cys Pro Tyr |      |
| 177 485 490 495   |      |
| 179 atg tgg ccc tac tgc tcc cag ccc atc tac tat gga gga atg cca aca | 1953 |
| 180 Met Trp Pro Tyr Cys Ser Gln Pro Ile Tyr Tyr Gly Gly Met Pro Thr |      |
| 181 500 505 510   |      |
| 183 att gtt aat gtc acc atc ctc aat ggc atg gga gtt aca gga aga att | 2001 |
| 184 Ile Val Asn Val Thr Ile Leu Asn Gly Met Gly Val Thr Gly Arg Ile |      |
| 185 515 520 525   |      |
| 187 gtg gat aag cct gag tgg cga ccc tat tta cca cag aat gga gac aac | 2049 |
| 188 Val Asp Lys Pro Glu Trp Arg Pro Tyr Leu Pro Gln Asn Gly Asp Asn |      |
| 189 530 535 540   |      |
| 191 att gaa gtg gcc ttc tcc tac tcc tca gtg ttg tgg cct tgg tca ggt | 2097 |
| 192 Ile Glu Val Ala Phe Ser Tyr Ser Ser Val Leu Trp Pro Trp Ser Gly |      |
| 193 545 550 555 560   |      |
| 195 tac ctt gcc atc tcc att tct gtg acc aag aag gca gct tcc tgg gaa | 2145 |
| 196 Tyr Leu Ala Ile Ser Ile Ser Val Thr Lys Lys Ala Ala Ser Trp Glu |      |
| 197 565 570 575   |      |
| 199 ggc atc gcg cag ggc cac atc atg atc aca gtg gct tcc cca gca gag | 2193 |

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|-----|--|-----|-----|------|
| 200 | Gly Ile Ala Gln Gly His Ile Met Ile Thr Val Ala Ser Pro Ala Glu  |     |     |      |
| 201 | 580  | 585 | 590 |      |
| 203 | acg gaa tta aaa aat ggt gcc gag cat act tcc aca gtg aag ctg ccc  |     |     | 2241 |
| 204 | Thr Glu Leu Lys Asn Gly Ala Glu His Thr Ser Thr Val Lys Leu Pro  |     |     |      |
| 205 | 595  | 600 | 605 |      |
| 207 | atc aag gtg aag atc att ccc acc cct cct cggt aag aag aca gtc ctc |     |     | 2289 |
| 208 | Ile Lys Val Lys Ile Ile Pro Thr Pro Pro Arg Ser Lys Arg Val Leu  |     |     |      |
| 209 | 610  | 615 | 620 |      |
| 211 | tgg gac cag tac cac aac ctc cgc tac cca ccc ggc tac ttc ccc agg  |     |     | 2337 |
| 212 | Trp Asp Gln Tyr His Asn Leu Arg Tyr Pro Pro Gly Tyr Phe Pro Arg  |     |     |      |
| 213 | 625  | 630 | 635 | 640  |
| 215 | gac aac ttg cgg atg aag aat gat cct tta gac tgg aat ggc gac cac  |     |     | 2385 |
| 216 | Asp Asn Leu Arg Met Lys Asn Asp Pro Leu Asp Trp Asn Gly Asp His  |     |     |      |
| 217 | 645  | 650 | 655 |      |
| 219 | gtc cac acc aac ttc agg gac atg tac cag cat ctg cgc agc atg ggc  |     |     | 2433 |
| 220 | Val His Thr Asn Phe Arg Asp Met Tyr Gln His Leu Arg Ser Met Gly  |     |     |      |
| 221 | 660  | 665 | 670 |      |
| 223 | tac ttt gtg gag gtg ctt ggt gcc cca ttc aca tgc ttt gac gcc acg  |     |     | 2481 |
| 224 | Tyr Phe Val Glu Val Leu Gly Ala Pro Phe Thr Cys Phe Asp Ala Thr  |     |     |      |
| 225 | 675  | 680 | 685 |      |
| 227 | cag tac ggc act ctg ctt atg gtg gac agt gag gaa gag tac ttc cct  |     |     | 2529 |
| 228 | Gln Tyr Gly Thr Leu Leu Met Val Asp Ser Glu Glu Glu Tyr Phe Pro  |     |     |      |
| 229 | 690  | 695 | 700 |      |
| 231 | gag gag att gct aag ctg agg agg gac gtg gac aat ggc ctt tcc ctt  |     |     | 2577 |
| 232 | Glu Glu Ile Ala Lys Leu Arg Arg Asp Val Asp Asn Gly Leu Ser Leu  |     |     |      |
| 233 | 705  | 710 | 715 | 720  |
| 237 | gtc gtc ttc agt gac tgg tac aac act tct gtt atg aga aaa gtg aag  |     |     | 2625 |
| 238 | Val Val Phe Ser Asp Trp Tyr Asn Thr Ser Val Met Arg Lys Val Lys  |     |     |      |
| 239 | 725  | 730 | 735 |      |
| 241 | ttt tac gat gaa aac aca agg cag tgg tgg atg cca gat act gga gga  |     |     | 2673 |
| 242 | Phe Tyr Asp Glu Asn Thr Arg Gln Trp Trp Met Pro Asp Thr Gly Gly  |     |     |      |
| 243 | 740  | 745 | 750 |      |
| 245 | gcc aac gtc cca gct cta aac gag ctg ctg tct gtg tgg aac atg ggg  |     |     | 2721 |
| 246 | Ala Asn Val Pro Ala Leu Asn Glu Leu Leu Ser Val Trp Asn Met Gly  |     |     |      |
| 247 | 755  | 760 | 765 |      |
| 249 | tcc agt gac ggc ctg tat gaa ggg gag ttt gcc ctg gca aac cac gac  |     |     | 2769 |
| 250 | Phe Ser Asp Gly Leu Tyr Glu Gly Glu Phe Ala Leu Ala Asn His Asp  |     |     |      |
| 251 | 770  | 775 | 780 |      |
| 253 | atg tac tat gca tcg ggg tgc agc att gcc agg ttt cca gaa gat ggt  |     |     | 2817 |
| 254 | Met Tyr Tyr Ala Ser Gly Cys Ser Ile Ala Arg Phe Pro Glu Asp Gly  |     |     |      |
| 255 | 785  | 790 | 795 | 800  |
| 257 | gtg gtg atc aca cag act ttc aag gac caa gga ttg gaa gtc tta aaa  |     |     | 2865 |
| 258 | Val Val Ile Thr Gln Thr Phe Lys Asp Gln Gly Leu Glu Val Leu Lys  |     |     |      |
| 259 | 805  | 810 | 815 |      |
| 261 | caa gag aca gca gtt gtc gac aat gtc ccc att ctg ggg cta tat cag  |     |     | 2913 |
| 262 | Gln Glu Thr Ala Val Val Asp Asn Val Pro Ile Leu Gly Leu Tyr Gln  |     |     |      |
| 263 | 820  | 825 | 830 |      |
| 265 | att cca gct gaa ggt gga ggc cgg att gtg ctg tat gga gac tcc aac  |     |     | 2961 |
| 266 | Ile Pro Ala Glu Gly Gly Arg Ile Val Leu Tyr Gly Asp Ser Asn      |     |     |      |

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|     |  |      |      |      |
|-----|--|------|------|------|
| 267 | 835  | 840  | 845  |      |
| 269 | tgc ttg gat gac agt cac aga cag aag gac tgc ttt tgg ctt ctg gat    |      |      | 3009 |
| 270 | Cys Leu Asp Asp Ser His Arg Gln Lys Asp Cys Phe Trp Leu Leu Asp    |      |      |      |
| 271 | 850  | 855  | 860  |      |
| 273 | gca ctc ctt cag tac aca tcc tat ggt gtg acc cct ccc agc ctc agc    |      |      | 3057 |
| 274 | Ala Leu Leu Gln Tyr Thr Ser Tyr Gly Val Thr Pro Pro Ser Leu Ser    |      |      |      |
| 275 | 865  | 870  | 875  | 880  |
| 277 | cat tca ggg aac cgg cag cgc cca ccc agc ggg gct ggc ttg gcc cct    |      |      | 3105 |
| 278 | His Ser Gly Asn Arg Gln Arg Pro Pro Ser Gly Ala Gly Leu Ala Pro    |      |      |      |
| 279 | 885  | 890  | 895  |      |
| 281 | cct gaa agg atg gaa gga aac cac ctt cat cgc tac tcc aaa gtt ctt    |      |      | 3153 |
| 282 | Pro Glu Arg Met Glu Gly Asn His Leu His Arg Tyr Ser Lys Val Leu    |      |      |      |
| 283 | 900  | 905  | 910  |      |
| 285 | gag gcc cac ttg gga gac ccg aaa cct ccg ccc ctt cca gcc tgt cca    |      |      | 3201 |
| 286 | Glu Ala His Leu Gly Asp Pro Lys Pro Arg Pro Leu Pro Ala Cys Pro    |      |      |      |
| 287 | 915  | 920  | 925  |      |
| 289 | cac ttg tcg tgg gcc aag cca cag cct ttg aat gag acg gca ccc agt    |      |      | 3249 |
| 290 | His Leu Ser Trp Ala Lys Pro Gln Pro Leu Asn Glu Thr Ala Pro Ser    |      |      |      |
| 291 | 930  | 935  | 940  |      |
| 293 | aat ctt tgg aaa cac cag aag ctg ctc tcc att gac ctg gac aaa gta    |      |      | 3297 |
| 294 | Asn Leu Trp Lys His Gln Lys Leu Leu Ser Ile Asp Leu Asp Lys Val    |      |      |      |
| 295 | 945  | 950  | 955  | 960  |
| 297 | gtg tta ccc aac ttt cgc tca aat cgc cct caa gtg aga cct ttg tcc    |      |      | 3345 |
| 298 | Val Leu Pro Asn Phe Arg Ser Asn Arg Pro Gln Val Arg Pro Leu Ser    |      |      |      |
| 299 | 965  | 970  | 975  |      |
| 301 | cct gga gaa agt ggt gcc tgg gac att cct gga ggg atc atg cct ggc    |      |      | 3393 |
| 302 | Pro Gly Glu Ser Gly Ala Trp Asp Ile Pro Gly Gly Ile Met Pro Gly    |      |      |      |
| 303 | 980  | 985  | 990  |      |
| 305 | cgc tac aac cag gaa gta ggc cag acc atc cct gtt ttt gcc ttc ctt    |      |      | 3441 |
| 306 | Arg Tyr Asn Gln Glu Val Gly Gln Thr Ile Pro Val Phe Ala Phe Leu    |      |      |      |
| 307 | 995  | 1000 | 1005 |      |
| 309 | gga gcc atg gtg gcc ctg gcc ttc ttc gtg gta cag atc agt aag        |      |      | 3486 |
| 310 | Gly Ala Met Val Ala Leu Ala Phe Phe Val Val Gln Ile Ser Lys        |      |      |      |
| 311 | 1010   | 1015 | 1020 |      |
| 313 | gcc aag agc cgg ccg aag cgg agg agg ccc agg gca aag cgt cca        |      |      | 3531 |
| 314 | Ala Lys Ser Arg Pro Lys Arg Arg Arg Pro Arg Ala Lys Arg Pro        |      |      |      |
| 315 | 1025   | 1030 | 1035 |      |
| 317 | caa ctt gca cag cag gcc cac cct gca agg acc ccg tca gtg            |      |      | 3573 |
| 318 | Gln Leu Ala Gln Gln Ala His Pro Ala Arg Thr Pro Ser Val            |      |      |      |
| 319 | 1040   | 1045 | 1050 |      |
| 321 | tgatcatcac agtggccaga cacagaagct gacaagcttt gaaccctct gggtggccaca  |      |      | 3633 |
| 323 | cagcatcaga gagcatctg ggaagtgcct gtttccaagg agccctatct ctggatttg    |      |      | 3693 |
| 325 | gctggcttag tgtgtctgc ccagacgtct atgaggtaca tcctgcagtg cctcaactgtg  |      |      | 3753 |
| 327 | tttggctctg gccgaagggtg cczagtagct cagcctccgg tggcatcagg cccagtgaca |      |      | 3813 |
| 329 | gtgcaccaaa gacacagagc ctggaagggc tgtcgaaata tactttctac ataatgtac   |      |      | 3873 |
| 331 | aaccctgacc aagcgaagac at   |      |      | 3895 |
| 334 | <210> SEQ ID NO: 2   |      |      |      |
| 335 | <211> LENGTH: 1052   |      |      |      |
| 336 | <212> TYPE: PRT  |      |      |      |

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 02/24/2006  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 2,3,4,5,6,7  
Seq#:8; Xaa Pos. 2,3,4,5,6,7  
Seq#:9; Xaa Pos. 2,3,4,5,6,7,8  
Seq#:10; Xaa Pos. 2,3,4,5,6,7,8  
Seq#:11; Xaa Pos. 2,3,4,5,6,7,8,9  
Seq#:12; Xaa Pos. 2,3,4,5,6,7,8,9  
Seq#:14; Xaa Pos. 1,13  
Seq#:15; N Pos. 3,9,12,18,21  
Seq#:16; N Pos. 3,6,9,12,15,18,21,24,29  
Seq#:17; Xaa Pos. 5,6  
Seq#:18; Xaa Pos. 4,6,8,10  
Seq#:46; Xaa Pos. 1,13  
Seq#:47; Xaa Pos. 1,11  
Seq#:74; Xaa Pos. 1,13  
Seq#:75; Xaa Pos. 1,11  
Seq#:76; Xaa Pos. 1,14  
Seq#:101; Xaa Pos. 1  
Seq#:102; Xaa Pos. 1  
Seq#:103; Xaa Pos. 6  
Seq#:107; Xaa Pos. 1,11

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L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:1811 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:1852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:1887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:1927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:1965 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:2005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:2033 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14  
L:2038 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14  
L:2044 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:2083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:2141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:2201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:2585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0  
L:2610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:2928 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0  
L:2953 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0  
L:2978 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
L:3279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
L:3299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0  
L:3319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0  
L:3377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0

## **Raw Sequence Listing before editing (for reference only)**



IFW16

**RAW SEQUENCE LISTING**  
PATENT APPLICATION: US/09/830,837B

DATE: 02/23/2006  
TIME: 11:44:13

Input Set : A:\PTO.TS.23.txt  
Output Set: N:\CRF4\02232006\I830837B.raw

3 <110> APPLICANT: Institut de Recherches Cliniques de Montreal  
 4 Seidah, Nabil  
 5 ChrEtien, Michel  
 6 Marcinkiewicz, Mieczyslaw  
 7 Laaksonen, Reijo  
 8 Davignon, Jean  
 10 <120> TITLE OF INVENTION: MAMMALIAN SUBTILISIN/KEXIN ISOZYME SKI-1: A PROPROTEIN  
 CONVERTASE  
 11 WITH A UNIQUE CLEAVAGE SPECIFICITY  
 13 <130> FILE REFERENCE: 10992.29  
 15 <140> CURRENT APPLICATION NUMBER: US 09/830,837B  
 C--> 16 <141> CURRENT FILING DATE: 2001-10-18  
 18 <150> PRIOR APPLICATION NUMBER: PCT/CA1999/01058  
 19 <151> PRIOR FILING DATE: 1999-11-04  
 21 <150> PRIOR APPLICATION NUMBER: CA 2,249,648  
 22 <151> PRIOR FILING DATE: 1998-11-04  
 24 <160> NUMBER OF SEQ ID NOS: 108  
 26 <170> SOFTWARE: PatentIn version 3.3

*Does Not Comply  
Corrected Diskette Needed*

#### ERRORED SEQUENCES

E--> 2757 <210> SEQ ID NO: 64  
 2758 <211> LENGTH: 16  
 2759 <212> TYPE: PRT  
 2760 <213> ORGANISM: Bovis sp.  
 E--> 2762 <400> SEQUENCE: 61  
 2764 Glu Leu Glu Asn Leu Ala Ala Met Asp Leu Glu Leu Gln Lys Ile Ala  
 2765 1 5 10 15  
 E--> 2768 <210> SEQ ID NO: 62  
 3100 <210> SEQ ID NO: 87  
 3101 <211> LENGTH: 11  
 3102 <212> TYPE: PRT  
 3103 <213> ORGANISM: Sus sp.  
 E--> 3105 <400> SEQUENCE: 87  
 3107 Arg Gly Leu Thr Ser Ser Ser Ser Ser Leu  
 3108 1 5 10  
 3381 <210> SEQ ID NO: 108  
 3382 <211> LENGTH: 12  
 3383 <212> TYPE: PRT  
 3384 <213> ORGANISM: Homo sapiens  
 3386 <400> SEQUENCE: 108  
 3388 Gln Arg Lys Val Phe Arg Ser Leu Lys Tyr Ala Glu  
 3389 1 5 10

P.2

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/830,837B

DATE: 02/23/2006  
TIME: 11:44:13

Input Set : A:\PTO.TS.23.txt  
Output Set: N:\CRF4\02232006\I830837B.raw

E--> 3393 58  
3396 1/34

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/830,837B

DATE: 02/23/2006

TIME: 11:44:14

Input Set : A:\PTO.TS.23.txt

Output Set: N:\CRF4\02232006\I830837B.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:1811 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:1852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:1887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:1927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:1965 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:2005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:2033 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14  
L:2038 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14  
L:2044 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:2083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:2141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:2201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:2585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0  
L:2610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:2757 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 61 thru 63  
L:2762 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:64 differs:61  
L:2768 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 62  
L:2928 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0  
L:2953 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0  
L:2978 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
L:3105 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:87 differs:78  
L:3279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
L:3299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0  
L:3319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0  
L:3377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0  
L:3393 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:108